



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

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JAN 28 2011

OFFICE OF
WATER AND WATERSHEDS

Ms. Marilyn Fonseca
Water Quality Division
Department of Environmental Quality
811 SW 6th Avenue
Portland, Oregon 97204

Dear Ms. Fonseca:

This letter is in regard to the Idaho Power Company's petition to the Oregon Environmental Quality Commission (EQC) to initiate rulemaking to establish site specific temperature criteria to protect Fall Chinook salmon spawning in the Snake River downstream of the Hells Canyon Complex (HCC).

As you are aware, while water quality standards are adopted by the state, they must be adopted consistent with the Clean Water Act (CWA) and approved by EPA. When adopting a water quality standard revision, the state must ensure it meets the CWA requirements, including the opportunity for public comment and public hearing.

Due to the limited time provided to review this proposal, EPA has not had adequate time to fully review the petition and appendices. Thus, we can not provide you with a clear indication of whether the proposed criteria would or would not be protective of designated uses in the Snake River. As such, nothing in this letter should be considered a final determination by EPA regarding the protectiveness of the proposed criteria. Nonetheless, EPA has several concerns with the petition that we would like to bring to the attention of the Department of Environmental Quality (DEQ) and the EQC.

First, as part of Oregon's triennial reviews dating back to the mid 1990s and in the development of the 2003 EPA Region 10 Temperature Guidance, EPA and the DEQ have undergone considerable review and analysis regarding the 13°C criterion and the protection it provides for salmon spawning and egg incubation. Altering this criterion on a site-specific basis would need to be based on unambiguous new scientific information and analysis.

Second, although the petition only requests site specific criteria to protect Fall Chinook spawning in the Snake River, the analysis should discuss why this river segment and population of Fall Chinook salmon require less stringent criteria than Fall Chinook in other Oregon rivers.

Third, EPA would like to note that application of the 13°C criterion in the Snake River is already customized. The selection of the October 23rd start date in Oregon's water quality standards was based on the Snake River Temperature TMDL, which included an interpretation of

when the 13°C criterion applied because when the TMDL was developed the standards did not specify when this criterion applied. Subsequently, Oregon revised its standards to specify when and where the 13°C criterion applied, which resulted in all other Oregon rivers having the 13°C criterion start on either the 1st or 15th of the month, with first documented spawning occurring in the two weeks prior to start date. Thus, if the state-wide general methodology was used to determine the start date for the Hells Canyon reach of the Snake River instead of the TMDL, it would have been October 15th since spawning starts there during the first two weeks of October. Accordingly, if the EQC decides to proceed with rulemaking on the petition, EPA believes the appropriate start date based on the latest spawning information should be a consideration in the rulemaking since when the criteria apply is an integral component of the criteria.

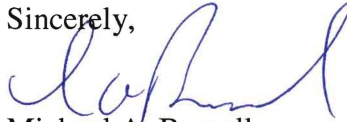
Fourth, as the petition mentions, in 2006 the Idaho Power Company encouraged the State of Idaho to consider a 16.5°C initial criterion on October 23 followed with a criterion on each subsequent day that is 0.2°C lower until a 13°C criterion applied on November 11 and thereafter until April 15. The primary scientific basis for these suggested criteria was the Geist et al. study (2006). In a letter dated September 27, 2006, from Christine Pysk, EPA to Barry Burnell, IDEQ (enclosed), EPA raised the concern that, in the Geist et al. study, adult salmon were held at 12°C prior to spawning at the differing temperature regimes and that Fall Chinook adults in Snake River are exposed to much higher pre-spawning temperatures (16.5-18°C). Thus, the applicability of this study to the Snake River Fall Chinook in the actual river environment is questionable. The Geist et al. study is one of the primary studies cited in the petition and EPA continues to have the same concerns regarding the applicability of this study.

Fifth, the viability of eggs and fry emerging from gravels is influenced by the temperatures the adults are exposure to during migration through spawning as well as the temperatures that eggs are exposed to in the gravels (see enclosed EPA 12/10/08 Draft White Paper for a discussion of the potential for reduced survival of eggs and hatched fry from the current temperature regime in the Hells Canyon reach of the Snake River). Currently, Oregon standards protect Snake River Fall Chinook egg and fry viability with a combination of the Natural Seasonal Temperature Pattern narrative criteria (oriented toward migrating and pre-spawning adults) and the 13°C spawning criterion (oriented toward eggs in the gravel). EPA has approved these standards and has determined they are protective of Fall Chinook. EPA raises this dual criteria consideration because in the context of protecting egg and fry viability of Fall Chinook salmon in the Snake River it is difficult to isolate just the spawning criteria to determine overall protectiveness. Thus, a site specific assessment of protective criteria for Fall Chinook in the Snake River should address the adult migration (late summer) through fry emergence (April) period.

Lastly, the petition notes the increased adult returns of Snake River Fall Chinook salmon as context to suggest the current temperature regime is generally protective. Although it is true that hatchery returns have increased over the last decade due in large part to increased hatchery releases, "natural origin" adult returns have not. Hatchery fish do not experience the same temperature regime as natural fish so it is difficult to draw conclusions that increased hatchery returns is an indicator that the current temperature regime in the Hells Canyon reach of the Snake River is protective of Fall Chinook salmon.

Thank you for your consideration on our comments. Please feel free to call me if you have any questions at (206) 553-4198, you may also contact John Palmer of my staff at (206) 553-6521.

Sincerely,



Michael A. Bussell

Director

Office of Water and Watersheds

Enclosures